

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.





How Heavy Should I Feed My Hogs ?

HOW HEAVY should a hog be to make the most money when it's sent to market? That's something every farmer has to figure out for himself; and the answer changes from one season to the next. But here is a rough guide that should make the figuring a little easier. It is based on a study of feed consumption made by the United States Department of Agriculture and several State experiment stations. Detailed results of this study were published in United States Department of Agriculture Technical Bulletin No. 894, "Feed Consumption and Marketing Weight of Hogs," by L. J. Atkinson and John W. Klein. This guide fits the

average farm over several years; but you may have to adjust it some to fit your farm land this year.

Suppose you are wondering whether to put an extra 50 pounds gain onto one of your hogs, and it will take a month to do it. Then your problem is to figure out how much the extra 50 pounds of live hog will be worth; and how much it will cost to keep a hog, and feed it for an extra month, and how much the price of hogs is likely to change in a month.

Generally, it takes about 4.5 bushels of corn or its equal in other feeds to fatten a 200-pound hog up to 250 pounds. It takes around 4.6 bushels of corn or its equal in other feed to put 50 pounds of

gain onto a 225-pound hog, 4.8 bushels on a 250-pound hog, and 4.9 bushels to put 50 pounds of gain on a 275-pound hog, fattening it up to 325 pounds.

Feed is usually about four-fifths of the total cost of fattening hogs. You would just about break even if you got a return of \$1.25 for each \$1 worth of feed you put into them.

The question hardest to answer at any time is, how much the price of hogs may change within a month. Table 1 on page 3 shows for different months the number of years from 1932 to 1941 that hogs of a given weight increased or decreased in price 30 days after putting on 50 pounds of gain. For example, it shows that in 5 years out of 10 the average price of a hog weighing 200 pounds in January increased 3 to 9 percent in 30 days, and in 2 of the years it increased 10 percent or more. In only 2 years was there a decrease in price and it was less than 10 percent. This applied about equally well to hogs weighing 225, 250, and 275 pounds in January as to the 200-pound hogs.

Table 1 indicates that price increases were most frequent from May to June and June to July. On the other hand, sharp decreases in price occurred most frequently from September to October. This price decline continued from October to November. Price decreases occurred more frequently if the hogs weighed 275 pounds at the beginning of the 30-day feeding period.

Although table 1 shows a fairly regular price change from month to month in the prewar years 1932-41, you cannot be sure that the same kind of a change will take place this year or next. Price prospects need to be considered on the basis of the current situation. You can usually obtain current outlook reports in the county extension office. These, together with table 1, should be helpful in sizing up price prospects for the next 30 days.

Table 2 on page 4 shows the lowest selling price per 100 pounds for hogs at which you could expect to break even, with different current prices for corn and hogs. The figures include an allowance of 25 percent above the cost of the feed for other costs such as labor and risk. After making up your mind as to what the price of hogs is likely to be in another

month and comparing this with the necessary selling price you can decide whether to fatten the hogs for another month or not.

How to Calculate Expected Return per \$1 of Additional Feed Costs

If you are considering putting additional gain on hogs the first thing to consider is what the hog is worth now. Multiply the weight by the price at the farm. A 225-pound hog at \$25 per hundred pounds=\$56.25. Now, what will the price of the hog be a month from now when it will weigh 275 pounds? Table 1 may help to answer this question. If there is a reasonable expectation of a 5 percent decrease the selling price would be \$25 less 5 percent, or \$23.75; and the value of the 275-pound hog would be $275 \times \$23.75$ per hundred weight, or \$65.31. The feed cost of putting on 50 pounds gain is 4.6 bushels of corn or the equivalent in other feed. (See page 1 for corn required to put 50 pounds gain on hogs of other weights.) With corn at \$1.50 the cost of 4.6 bushels is \$6.90. To summarize:

Value of 225-pound hog at \$25 per hundredweight.....	\$56.25
Value of 275-pound hog at \$23.75 per hundredweight.....	65.31
Margin.....	\$9.06
Cost of 4.6 bushels of corn at \$1.50 per bushel.....	\$6.90
Return per \$1 of additional feed cost ($\$9.06 \div \$6.90 = \$1.31$).....	\$1.31

This is more than \$1.25 considered as the *break-even* point and is therefore profitable.

How far can the price of hogs go down in the next 30 days and still pay for the additional corn and other costs? In the example just considered the feed cost is \$6.90 and to this should be added 25 percent, or \$1.72, to take care of other costs. The total cost is therefore \$8.62. This should be added to the value of the hog at the beginning—\$56.25; it gives \$64.87 as the necessary selling price for the 275-pound hog, in order to pay for the corn and the other costs to be incurred in the next 30 days. The necessary price to break even therefore is \$23.59 per hundred pounds.

TABLE 1.—Number of years out of 10 from 1932 to 1941 that hogs of different weights in a given month increased or decreased in price when fed an additional 30 days and gaining 50 pounds¹

MONTH	200-POUND HOGS FED AN ADDITIONAL 30 DAYS					225-POUND HOGS FED AN ADDITIONAL 30 DAYS				
	Increased in Price		Changed less than 3 percent in Price	Decreased in Price		Increased in Price		Changed less than 3 percent in Price	Decreased in Price	
	10 Percent or More	3-9 Percent		3-9 Percent	10 Percent or More	10 Percent or More	3-9 Percent		3-9 Percent	10 Percent or More
Jan.....	2	3	3	2	-----	2	3	3	2	-----
Feb.....	-----	4	2	4	-----	-----	4	1	5	-----
March.....	-----	2	3	2	3	-----	1	4	1	4
April.....	1	4	-----	3	2	1	3	1	3	2
May.....	1	5	2	1	1	1	4	2	2	1
June.....	3	5	2	-----	-----	3	3	3	1	-----
July.....	2	2	2	1	3	2	1	3	-----	4
Aug.....	2	-----	5	2	1	2	-----	4	3	1
Sept.....	-----	-----	1	3	6	-----	-----	1	3	6
Oct.....	-----	1	1	5	3	-----	-----	1	6	3
Nov.....	1	3	1	2	3	-----	3	2	1	4
Dec.....	2	2	4	2	-----	2	1	3	4	-----
	250-POUND HOGS FED AN ADDITIONAL 30 DAYS					275-POUND HOGS FED AN ADDITIONAL 30 DAYS				
	Increased in Price		Changed less than 3 percent in Price	Decreased in Price		Increased in Price		Changed less than 3 percent in Price	Decreased in Price	
	10 Percent or More	3-9 Percent		3-9 Percent	10 Percent or More	10 Percent or More	3-9 Percent		3-9 Percent	10 Percent or More
Jan.....	2	4	2	2	-----	2	3	2	3	-----
Feb.....	-----	4	1	5	-----	-----	4	1	5	-----
March.....	-----	2	2	3	3	-----	2	2	2	4
April.....	1	3	1	2	3	-----	3	1	2	4
May.....	1	5	1	2	1	1	5	2	1	1
June.....	2	3	4	-----	1	3	3	3	-----	1
July.....	2	1	2	1	4	2	-----	2	2	4
Aug.....	2	-----	4	4	-----	2	-----	3	5	-----
Sept.....	-----	-----	1	3	6	-----	-----	-----	3	7
Oct.....	-----	-----	1	5	4	-----	-----	1	5	4
Nov.....	-----	3	2	1	4	-----	3	2	1	4
Dec.....	2	1	4	3	-----	2	1	2	5	-----

¹ Based on prices of good to choice barrows and gilts in Chicago 1932 to 1941. The average monthly prices varied from less than \$3.00 to over \$12.00 per hundred pounds in this period.

Table 2 gives the necessary selling price for hogs; that is, the *break-even price* after putting on 50 pounds extra weight when corn and hogs are selling at different prices. Usually it does not pay to fatten hogs that weigh 200 pounds in August or September to heavier weights, because the price usually drops sharply in the fall. Table 1 shows that the price-change expectancy, after 50 pounds of gain has been added, is a sharp decrease in September and a decrease again in October. The heavier the hogs the more the decrease. This decrease in price expectancy will usually more than

offset the value of the gain in weight at that time of the year. For instance, assume that a 225-pound hog is worth \$25 per hundred pounds in September or a total of \$56.25 per head and that in October the 275-pound hog will sell for 10 percent less per hundred pounds—\$22.50, or a total of \$61.88 per head. This leaves a margin of \$5.63 to cover all costs, of which 80 percent or \$4.50 should be allowed for feed. Since it takes 4.6 bushels of corn to fatten a hog from 225 to 275 pounds the corn would bring less than \$1 per bushel if used for fattening the hog from September to October.

TABLE 2.—*Necessary selling price for hogs one month from now to permit the feeder to break even in putting on 50 pounds additional weight on hogs of different weights with different prices for corn and hogs now*¹

Price of Corn per Bushel Now	PRICE OF HOGS IN DOLLARS PER HUNDRED POUNDS, NOW										
	5.00	7.50	10.00	12.50	15.00	17.50	20.00	22.50	25.00	27.50	30.00
(Dollars)	ON HOGS WEIGHING 200 POUNDS, NOW										
.50	5.12	7.12	9.12	11.12	13.12	15.12	17.12	19.12	21.12	23.12	25.12
.75	5.68	7.68	9.68	11.68	13.68	15.68	17.68	19.68	21.68	23.68	25.68
1.00	6.25	8.25	10.25	12.25	14.25	16.25	18.25	20.25	22.25	24.25	26.25
1.25	6.81	8.81	10.81	12.81	14.81	16.81	18.81	20.81	22.81	24.81	26.81
1.50	7.38	9.38	11.38	13.38	15.38	17.38	19.38	21.38	23.38	25.38	27.38
1.75	7.94	9.94	11.94	13.94	15.94	17.94	19.94	21.94	23.94	25.94	27.94
2.00	8.50	10.50	12.50	14.50	16.50	18.50	20.50	22.50	24.50	26.50	28.50
2.25	9.06	11.06	13.06	15.06	17.06	19.06	21.06	23.06	25.06	27.06	29.06
2.50	9.62	11.62	13.62	15.62	17.62	19.62	21.62	23.62	25.62	27.62	29.62
2.75	10.18	12.18	14.18	16.18	18.18	20.18	22.18	24.18	26.18	28.18	30.18
3.00	10.75	12.75	14.75	16.75	18.75	20.75	22.75	24.75	26.75	28.75	30.75
	ON HOGS WEIGHING 225 POUNDS, NOW										
.50	5.14	7.18	9.23	11.27	13.32	15.36	17.41	19.45	21.50	23.55	25.59
.75	5.66	7.70	9.75	11.79	13.84	15.88	17.93	19.97	22.02	24.07	26.11
1.00	6.18	8.23	10.27	12.32	14.36	16.41	18.45	20.50	22.55	24.59	26.64
1.25	6.71	8.75	10.80	12.84	14.89	16.93	18.98	21.02	23.07	25.12	27.16
1.50	7.23	9.27	11.32	13.36	15.41	17.45	19.50	21.54	23.59	25.64	27.68
1.75	7.75	9.79	11.84	13.88	15.93	17.97	20.02	22.07	24.11	26.16	28.20
2.00	8.27	10.32	12.36	14.41	16.45	18.50	20.55	22.59	24.64	26.68	28.73
2.25	8.80	10.84	12.89	14.93	16.98	19.02	21.07	23.11	25.16	27.21	29.25
2.50	9.32	11.36	13.41	15.45	17.50	19.55	21.59	23.64	25.68	27.73	29.77
2.75	9.84	11.88	13.93	15.97	18.02	20.07	22.11	24.16	26.20	28.25	30.29
3.00	10.36	12.41	14.45	16.50	18.55	20.59	22.64	24.68	26.73	28.77	30.82
	ON HOGS WEIGHING 250 POUNDS, NOW										
.50	5.17	7.25	9.33	11.42	13.50	15.58	17.67	19.75	21.83	23.92	26.00
.75	5.67	7.75	9.83	11.92	14.00	16.08	18.17	20.25	22.33	24.42	26.50
1.00	6.17	8.25	10.33	12.42	14.50	16.58	18.67	20.75	22.83	24.92	27.00
1.25	6.67	8.75	10.83	12.92	15.00	17.08	19.17	21.25	23.33	25.42	27.50
1.50	7.17	9.25	11.33	13.42	15.50	17.58	19.67	21.75	23.83	25.92	28.00
1.75	7.67	9.75	11.83	13.92	16.00	18.08	20.17	22.25	24.33	26.42	28.50
2.00	8.17	10.25	12.33	14.42	16.50	18.58	20.67	22.75	24.83	26.92	29.00
2.25	8.67	10.75	12.83	14.92	17.00	19.08	21.17	23.25	25.33	27.42	29.50
2.50	9.17	11.25	13.33	15.42	17.50	19.58	21.67	23.75	25.83	27.92	30.00
2.75	9.67	11.75	13.83	15.92	18.00	20.08	22.17	24.25	26.33	28.42	30.50
3.00	10.17	12.25	14.33	16.42	18.50	20.58	22.67	24.75	26.83	28.92	31.00
	ON HOGS WEIGHING 275 POUNDS, NOW										
.50	5.17	7.29	9.40	11.52	13.63	15.75	17.86	19.98	22.10	24.21	26.33
.75	5.64	7.76	9.87	11.99	14.10	16.22	18.33	20.45	22.57	24.68	26.80
1.00	6.11	8.23	10.34	12.46	14.57	16.69	18.80	20.92	23.04	25.15	27.27
1.25	6.58	8.70	10.81	12.93	15.04	17.16	19.28	21.39	23.51	25.62	27.74
1.50	7.06	9.17	11.29	13.40	15.52	17.63	19.75	21.86	23.98	26.09	28.21
1.75	7.53	9.64	11.76	13.87	15.99	18.10	20.22	22.33	24.45	26.56	28.68
2.00	8.00	10.11	12.23	14.34	16.46	18.57	20.69	22.81	24.92	27.03	29.15
2.25	8.47	10.58	12.70	14.81	16.93	19.04	21.16	23.28	25.39	27.50	29.62
2.50	8.94	11.05	13.17	15.28	17.40	19.52	21.63	23.75	25.86	27.98	30.09
2.75	9.41	11.53	13.64	15.75	17.87	19.99	22.10	24.22	26.33	28.45	30.56
3.00	9.88	12.00	14.11	16.23	18.34	20.46	22.57	24.69	26.80	28.92	31.04

¹ By "break even" is meant to get back the cost of feed at present prices for the extra month plus 25 percent for other costs such as labor, use of equipment, and risk.